

## A Systematic Study on the Ant Genus *Ponera* Latreille (Hymenoptera: Formicidae) of China

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**Abstract:** Eight species of the ant genus *Ponera* Latreille are recorded in China, among them 5 new species are discovered and described from Xishuangbanna Nature Reserve of Yunnan Province; *P. sinensis* Wheeler distributed in Hong Kong; *P. alisana* Terayama and *P. chiponensis* Terayama distributed in Taiwan Province; *P. pentodontos*, sp. nov., *P. menglana*, sp. nov., *P. nangongshana*, sp. nov., *P. longlina*, sp. nov., and *P. baka*, sp. nov. distributed in Yunnan Province. A key based on worker caste is provided for the 8 species. The type specimens are deposited in the Insect Collection, Southwest Forestry College, Kunming, Yunnan, China.

**Key words:** Hymenoptera, Formicidae, *Ponera*, Systematics, China

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The ant genus *Ponera* Latreille is distributed in Holarctic, Oriental, Indo-Australian and Australasian regions. According to Bolton (1995), 37 valid species of the genus were recorded in the world. Twenty-seven species were known in East Asia and Southeast Asia. Taylor (1967) had a monographic revision of the genus, 28 living and 1 extinct species were treated.

Wheeler (1928) firstly described 2 species of *Ponera* in China: *P. sinensis* from Hong Kong and *P. excoecata* from Taipo, but the latter was moved to *Hypoponera* Santschi by Ogata in 1987. Terayama (1986) recorded 2 species of *Ponera* from Taiwan Province, i. e. *P. alisana* and *P. chiponensis*. Xu et al. (1998) reported the distribution of *P. sinensis* in Yunnan Province. But the species, identified by Xu et al. as *P. sinensis* by mistake, should be a new species, i. e. *P. menglana*, sp. nov.. In this study, 5 new species are discovered and described from Xishuangbanna Nature Reserve of Yunnan Province. Up to date, 8 species of the genus are known in China.

Standard measurements and indices are as defined by Taylor (1967), TL-Total length, HL-Head length, HW-Head width, CI-Cephalic index =  $HW \times 100 / HL$ , SL-Scape length,

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SI-Scape index =  $SL \times 100 / HW$ , PW-Pronotum width, AL-Abdomen length, ED-Maximum diameter of eye, ML-Mandible length, PNL-Petiole node length, DPW-Dorsal petiole width, PH-Petiole height, PNI-Petiole node index =  $DPW \times 100 / PW$ , LPI-Lateral petiole index =  $PNL \times 100 / PH$ . All measurements are expressed in millimeters.

The type specimens are deposited in the Insect Collection, Southwest Forestry College, Kunming, Yunnan Province, P. R. China.

### Genus *Ponera* Latreille

*Ponera* Latreille, 1804, *Nouv. Dict. Hist. Nat.*, 24: 179. Type-species: *Formica coarctata* Latreille, by subsequent designation of Westwood, 1840:83.

Diagnosis of worker: Small to medium size ponerine ants; head width ranging about 0.30 mm~0.85 mm. Head longer than broad, roughly rectangular in frontal view, sometimes prismatic behind. Mandibles triangular, with 3 enlarged apical teeth followed by a series of small to minute, more or less regular denticles; several of these occasionally enlarged. No basal mandibular pit or groove. Palpal formula; Maxillary 2; Labial 2. Clypeus simple, often produced anteriorly, or with a raised tumosity or distinct tooth on the middle of its anterodorsal face. Eyes small, with 1~15, usually very indistinct, facets; situated about 0.75—0.90 × the distance from lateral occipital border to midpoint of anterior genal border. Scapes seldom exceeding median occipital border, their apices usually approximately contiguous with it, or falling to reach it by up to twice their maximum thickness. Funiculus incrassate, apical segment subequal in length to the two preceding together; an indistinct to distinct 4- or 5-segmented club often present. Mesosoma elongate, sides more or less parallel, dorsal profile usually flat. Posterolateral edges of propodeum sometimes marginate, forming angles of about 70°—90° when view from above. Mesometanotal and lateral mesonotal sutures may be present. Mesepisternum not divided by a horizontal suture. Middle and posterior tibiae each with a single pectinate apical spur; middle tarsi lacking setose bristles on their outer surfaces. Petiole node massive; relatively thick in side view, usually tapering only slightly dorsally; seen from above, its anterior face more or less semi-circular, the posterior one transverse, weakly concave to feebly convex. Dorsal and posterior faces of node forming a single arched surface, or with junction between them obtusely marginate. Edge between anterolateral, and posterodorsal faces of node rounded or marginate. Subpetiole process highly characteristic; usually shallow; with a rounded or bluntly angled anteroventral corner, and a more or less distinctly angular posteroventral one. Latter composed of 2 separate, small to large, right-angled to acute teeth, situated side by side, and sometimes inclined posterolaterally. Anteriorly, subpetiole process with a more or less distinct circular or oval thin-spot, or fenestra, visible in transmitted light. (Taylor, 1967)

#### Key to the known species of *Ponera* based on worker caste

1. Mandible with 5 subequal large teeth (Figs. 1~3) (Yunnan Province) ..... *P. pentodontos*, sp. nov.  
Mandible with 3 enlarged apical teeth followed by a series of small to minute denticles ..... 2
2. In profile view dorsal and posterior faces of petiole node formed a single arched surface ..... 3  
In profile view dorsal and posterior faces of petiole node formed an obtuse to right angle ..... 4

3. In profile view petiolar node roughly triangular, posterodorsal corner indistinct. Subpetiolar process with a large posteroventral tooth (Figs. 4~6) (Hong Kong) ..... *P. sinensis* Wheeler  
 In profile view petiolar node roughly trapezoid, posterodorsal corner roundly prominent. Subpetiolar process with a minute posteroventral tooth (Figs. 7~9) (Yunnan Province) .....  
 ..... *P. menglana*, sp. nov.
4. In profile view petiolar node with anterior and posterior faces nearly parallel ..... 5  
 In profile view petiolar node distinctly tapering dorsally, anterior and posterior faces not parallel ... 6
5. Anterior margin of clypeus with a distinct blunt median tooth. Apex of scape surpassed occipital corner by about 1/12 of its length. Subpetiolar process with a large posteroventral tooth (Figs. 10~12) (Taiwan Province) ..... *P. alisana* Terayama  
 Anterior margin of clypeus without a median tooth. Apex of scape failed to reach occipital corner by about 1/10 of its length. Subpetiolar process without posteroventral tooth (Figs. 13~15) (Yunnan Province) ..... *P. nangongshana*, sp. nov.
6. In dorsal view petiolar node roughly semicircular, anterior and lateral borders formed a single arch. In profile view petiolar node relatively thin, with dorsal face convex. Head relatively broad, CI 90 (Figs. 16~18) (Yunnan Province) ..... *P. longlina*, sp. nov.  
 In dorsal view petiolar node roughly trapezoid, anterior border relatively straight. In profile view petiolar node relatively thick, with dorsal face straight. Head relatively narrow, CI 76~79 ..... 7
7. Head distinctly narrowed forward. Anterior margin of clypeus with a weak median tooth. Subpetiolar process with large fenestra and a large posteroventral tooth (Figs. 19~21) (Taiwan Province) ..... *P. chiponensis* Terayama  
 Head not distinctly narrowed forward. Anterior margin of clypeus without a median tooth. Subpetiolar process with small fenestra and a minute posteroventral tooth (Figs. 22~24) (Yunnan Province) .....  
 ..... *P. baka*, sp. nov.

1. *Ponera pentodontos*, sp. nov. (Figs. 1~3)

Holotype worker, TL 2.7, HL 0.55, HW 0.53, CI 95, SL 0.45, SI 86, PW 0.40, AL 0.80, ED 0.03, ML 0.35, PNL 0.20, DPW 0.33, PH 0.40, PNI 81, LPI 50. Head nearly square, occipital margin weakly concave, occipital corners blunt, lateral sides weakly convex. Mandible with 5 distinct subequal large teeth. Anterior margin of clypeus convex and very bluntly angled in the middle. Apex of scape reached to 19/20 of the distance from antennal socket to occipital corner, antennal club consisted of the apical 5 segments. Eye with one facet. In profile view mesonotum weakly convex, promesonotal suture and metanotal groove distinct. Dorsum of propodeum and declivity subequal and flat, posterodorsal corner blunt. In profile view petiolar node distinctly tapering upward, anterior face straight and vertical, dorsal and posterior faces formed a single arched surface, anterodorsal corner blunt. Subpetiolar process cuneiform, fenestra circular and small, anteroventral corner rounded, posteroventral corner with a large tooth. In dorsal view petiolar node nearly semicircular, anterior and lateral borders formed a single arch, posterior border straight. Gaster weakly constricted between the two basal segments. Mandibles smooth and shining, with very sparse punctures. Head finely and closely punctured. Alitrunk, petiole and gaster finely and densely punctured. Surface of the whole body and appendages with dense decumbent pubescence, anterior portion of head, petiolar node and gaster with sparse erect short hairs. Body in color black. Mandibles, antennae and legs yellowish brown.

Paratype workers, TL 2.6-2.8, HL 0.55-0.58, HW 0.53-0.55, CI 95-98, SL

0.45-0.48, SI 82-86, PW 0.40-0.43, AL 0.80-0.83, ED 0.03-0.04, ML 0.35, PNL 0.20, DPW 0.33, PH 0.38-0.40, PNI 76-81, LPI 50-53 (5 measured). As holotype.

Holotype: worker, No. A97-2046, 730 m, Bubang Village, Mengla County, Yunnan Province, 17-VIII-1997, collected in a soil sample of seasonal rain forest by Zeng Guang. Paratypes: 1 worker, with same data as holotype; 1 worker, with same data as holotype but No. A97-2028; 8 workers, with same data as holotype but No. A97-2089, collected in a ground sample.

This new species is close to *P. sinensis* Wheeler (Figs. 4~6), but mandible with 5 distinct subequal large teeth; Head relatively broad, CI 95-98; Petiolar node comparatively narrow, PNI 76-81; Anteroventral corner of subpetiolar process rounded.

## 2. *Ponera menglana*, sp. nov. (Figs. 7~9)

Holotype worker: TL 2.9, HL 0.68, HW 0.60, CI 89, SL 0.50, SI 83, PW 0.50, AL 0.90, ED 0.03, ML 0.40, PNL 0.23, DPW 0.43, PH 0.50, PNI 85, LPI 45. Head roughly square, lightly longer than broad. Occipital margin slightly concave, occipital corners blunt, lateral sides weakly convex. Mandible with 3 enlarged apical teeth followed by a series of minute denticles. Anterior margin of clypeus evenly convex. Apex of scape reached to 9/10 of the distance from antennal socket to occipital corner, antennal club consisted of the apical 5 segments. Eye with one facet. In profile view dorsum of alitrunk slightly convex, promesonotal suture distinct, metanotal groove very weak with fine visible trace. Dorsum of propodeum about as long as declivity, posterodorsal corner of propodeum rounded, lateral sides of propodeum weakly depressed, declivity obviously depressed, lateral sides of declivity distinctly marginate. In profile view petiolar node higher than long, anterior face straight and vertical, dorsal and posterior faces formed a single arched surface, anterodorsal corner blunt. Subpetiolar process with small circular fenestra, anteroventral corner obliquely truncate, posteroventral corner with a minute denticle. In dorsal view petiolar node roughly semicircular, anterior and lateral borders formed a single arch, posterior face weakly concave. Gaster distinctly constricted between the two basal segments. Mandibles smooth and shining. Head, alitrunk and the two basal segments of gaster densely and finely punctured. Petiole with anterior and lateral faces weakly finely punctured, posterior face smooth. Segments 3~6 of gaster smooth and shining. The whole body surface with sparse erect or suberect hairs and dense decumbent pubescence. Scapes and tibiae with dense decumbent pubescence, but without erect hairs. Body in color black. Mandibles, antennae, legs, subpetiolar process and apex of gaster yellowish brown.

Paratype workers: TL 2.7-3.1, HL 0.65-0.68, HW 0.58-0.60, CI 85-89, SL 0.48-0.53, SI 83-88, PW 0.45-0.48, AL 0.85-0.90, ED 0.03, ML 0.33-0.38, PNL 0.20-0.23, DPW 0.40-0.43, PH 0.45-0.50, PNI 84-94, LPI 43-50 (5 measured). As holotype.

Holotype: worker, No. A97-2046, 730 m, Bubang Village, Mengla County, Yunnan Province, 17-VIII-1997, collected in a soil sample of seasonal rain forest by Zeng Guang. Paratypes: 4 workers and 2 males, with same data as holotype; 3 workers, with same data as holotype but No. A97-2024, collected in a ground sample; 9 workers, with same data as holotype but No. A97-2029; 7 workers and 1 dealate female, No. A97-1134, 660 m, Cuip-

ingfeng, Menglun Town, Mengla County, Yunnan Province, 10-VIII-1997, collected in a ground sample of karst monsoon forest by He Yunfeng; 6 workers, with same data as No. A97-1134 but No. A97-1153, collected by Liu Taiyong; 9 workers and 2 females, with same data as No. A97-1134 but No. A97-1162, collected by Xu Zhenghui.

This new species is close to *P. sinensis* Wheeler (Figs. 4~6), but with body larger, HL 0.65-0.68, HW 0.58-0.60; In profile view posterodorsal corner of petiolar node more convex; Posteroventral corner of subpetiolar process only with a minute denticle.

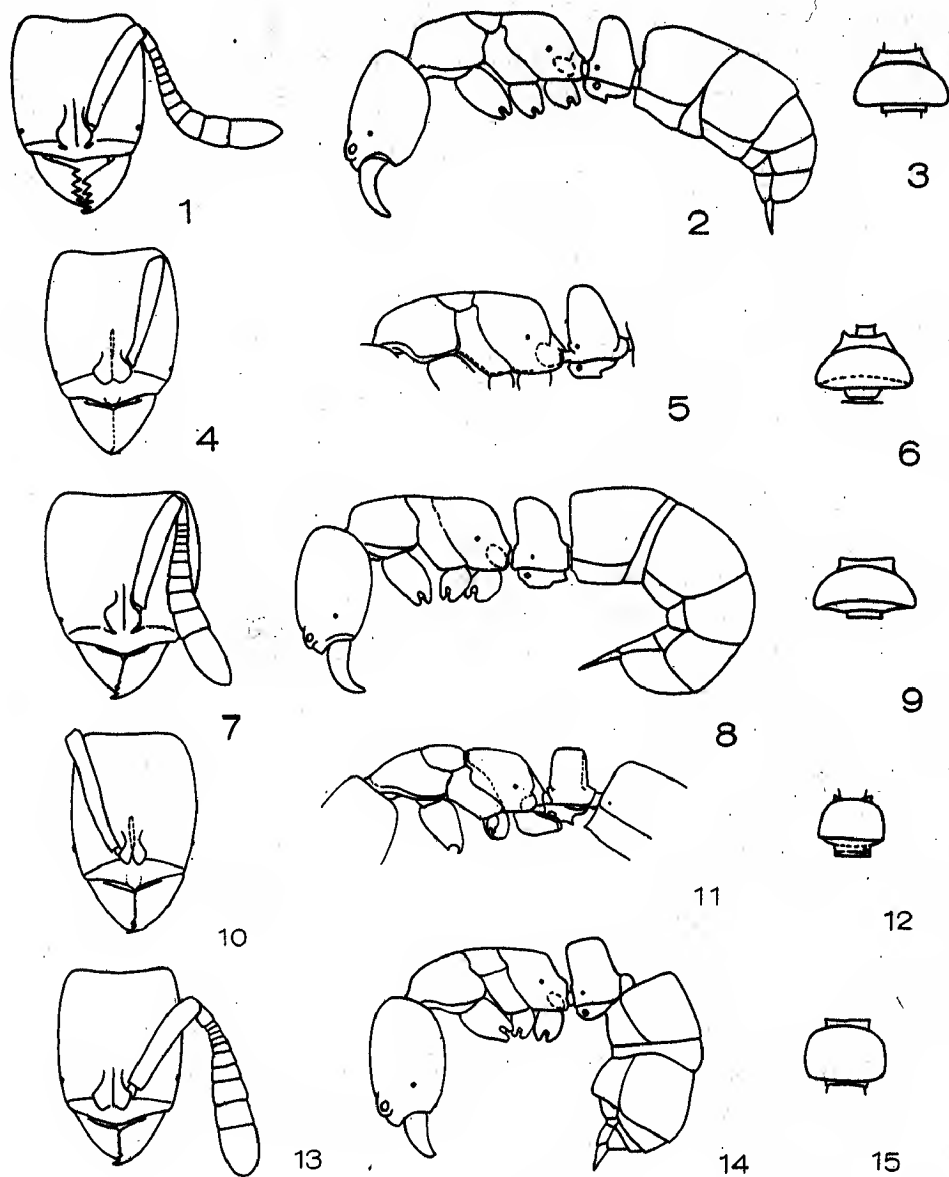
### 3. *Ponera nangongshana*, sp. nov. (Figs. 13~15)

Holotype worker: TL 2.6, HL 0.58, HW 0.48, CI 83, SL 0.40, SI 84, PW 0.38, AL 0.75, ED 0.03, ML 0.25, PNL 0.20, DPW 0.28, PH 0.38, PNI 73, LPI 53. Head roughly rectangular, longer than broad, weakly narrowed anteriorly. Occipital margin weakly concave, occipital corners bluntly prominent, lateral sides weakly convex. Mandible with 3 enlarged apical teeth followed by a series of minute denticles. Anterior margin of clypeus convex. Apex of scape reached to 9/10 of the distance from antennal socket to occipital corner, antennal club consisted of the apical 5 segments. Eye with one facet. In profile view dorsum of alitrunk weakly convex, promesonotal suture and metanotal groove distinct. Dorsum of propodeum longer than declivity, declivity flat, posterodorsal corner of propodeum bluntly angled. In profile view petiolar node thick, roughly square, anterior and posterior faces nearly straight and parallel, dorsal face weakly convex, anterodorsal and posterodorsal corners blunt. Subpetiolar process with small circular fenestra, anteroventral corner obliquely truncate, posteroventral corner without tooth. In dorsal view petiolar node roughly rectangular, anterior and lateral borders convex, posterior border nearly straight. Gaster distinctly constricted between the two basal segments. Mandibles smooth and shining, sparsely punctured. Head closely and finely punctured and dim. Alitrunk and gaster densely and finely punctured, less shining. Petiole shining, with very weak punctures. Surface of the whole body with very sparse erect short hairs and dense decumbent pubescence. Appendages with dense decumbent pubescence, but without erect hairs. Body in color reddish brown.

Paratype workers: TL 2.4-2.8, HL 0.55-0.60, HW 0.48, CI 79-83, SL 0.40-0.43, SI 84-89, PW 0.38-0.40, AL 0.73-0.78, ED 0.03-0.04, ML 0.28, PNL 0.20, DPW 0.28-0.30, PH 0.35-0.38, PNI 69-80, LPI 53-57 (5 measured). As holotype but body in color yellowish brown to reddish brown.

Holotype: worker, No. A98-824, 1620 m, Nangongshan Mountain, Mengla County, Yunnan Province, 15-III-1998, collected in a soil sample of monsoon evergreen broad-leaf forest by He Yunfeng. Paratypes: 3 workers, with same data as holotype; 1 worker, with same data as holotype but No. A98-819; 6 workers, with same data as holotype but Nos. A97-2184, A97-2186, 1525 m, 18-VIII-1997, collected in ground samples.

This new species is close to *P. alisana* Terayama (Figs. 10~12), but apex of scape failed to reach occipital margin; Anterior margin of clypeus without a blunt tooth in the middle; Posteroventral corner of subpetiolar process without tooth.



Figs. 1~15 *Ponera* workers; 1~3. *P. pentodontos*, sp. nov.; 4~6. *P. sinensis* Wheeler; 7~9. *P. menglana*, sp. nov.; 10~12. *P. alisana* Terayama; 13~15. *P. nangongshana*, sp. nov.; 1, 4, 7, 10, 13. head in full-face view; 2, 5, 8, 11, 14. body in profile view; 3, 6, 9, 12, 15. petiolar node in dorsal view; 4~6 after Taylor (1967); 10~12 after Terayama (1986)

4. *Ponera longlina*, sp. nov. (Figs. 16~18)

Holotype worker; TL 2.2, HL 0.50, HW 0.45, CI 90, SL 0.35, SI 78, PW 0.35, AL 0.63, ED 0.03, ML 0.25, PNL 0.18, DPW 0.25, PH 0.33, PNI 71, LPI 54. Head roughly square, slightly longer than broad, narrowed forward. Occipital margin weakly concave, occipital corners roundly prominent, lateral sides evenly convex. Mandible with 3

enlarged apical teeth followed by a series of minute denticles. Anterior margin of clypeus weakly convex. Apex of scape reached to 9/10 of the distance from antennal socket to occipital corner, antennal club consisted of the 4 apical segments. Eye with one facet. In profile view dorsum of alitrunk weakly convex, promesonotal suture distinct, metanotal groove absent. Dorsum of propodeum about as long as declivity, declivity flat, posterodorsal corner quite blunt. In profile view petiolar node weakly tapering upward, anterior and posterior faces straight, dorsal face evenly convex, anterodorsal corner blunt, posterodorsal corner more blunter. Subpetiolar process with small circular fenestra, anteroventral corner blunt, posteroventral corner with an enlarged tooth. In dorsal view the node roughly semicircular, anterior and lateral borders formed a single arch, posterior border weakly concave. Gaster weakly constricted between the two basal segments. Mandibles smooth and shining, sparsely punctured. Head densely and finely punctured, dim. Prothorax, mesothorax and gaster densely and weakly punctured, less shining. Propodeum and petiole smooth and shining, sparsely punctured. Surface of the whole body and appendages with dense decumbent pubescence, erect hairs only present on anterior portion of head and posterior half of gaster. Body in color reddish brown, head black, mandibles, antennae and legs yellowish brown.

Holotype: worker, No. A97-1315, 1050 m, Longlin Village, Mengla County, Yunnan Province, 11-VIII-1997, collected in a ground sample of mountain rain forest by He Yunfeng.

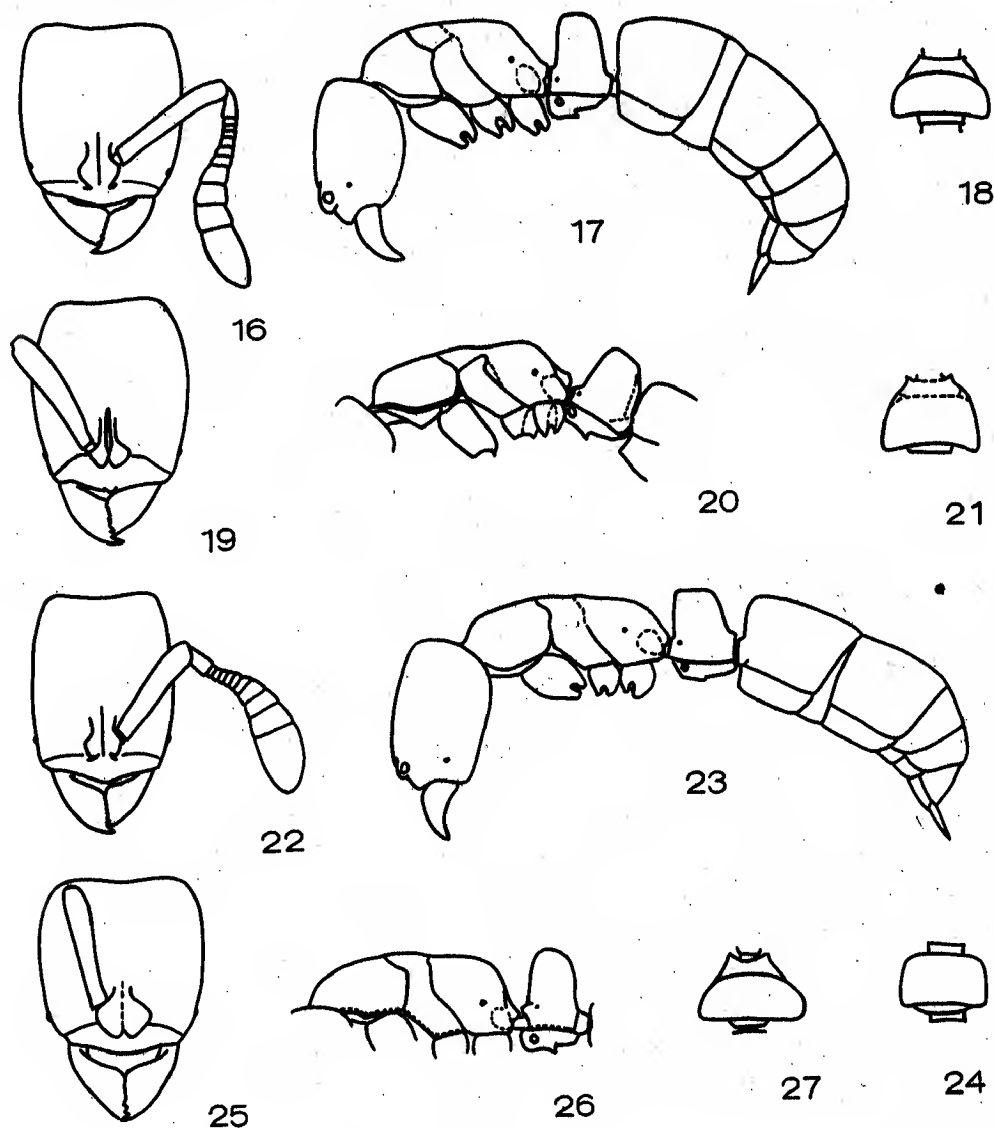
This new species is close to *P. oreas* (Wheeler) (Figs. 25~27) from Philippines, but eye only with one facet; Petiolar node relatively narrow, DPW 0.25, PNI 71; In profile view subpetiolar process with posteroventral tooth smaller and posteriorly pointed.

##### 5. *Ponera baka*, sp. nov. (Figs. 22~24)

Holotype worker: TL 1.9, HL 0.43, HW 0.33, CI 76, SL 0.25, SI 77, PW 0.25, AL 0.53, ED 0.03, ML 0.18, PNL 0.15, DPW 0.18, PH 0.25, PNI 70, LPI 60. Head rectangular, distinctly longer than broad. Occipital margin weakly concave, occipital corners bluntly prominent, lateral sides weakly convex. Mandible only with 3 apical teeth, the basal portion of masticatory margin without teeth or denticles. Anterior margin of clypeus convex and very bluntly angled in the middle. Antennae short, apex of scape reached to 4/5 of the distance from antennal socket to occipital corner, antennal club consisted of the 4 apical segments. Eye with one facet. In profile view dorsum of alitrunk weakly convex, promesonotal suture distinct, metanotal groove only with trace. Dorsum of propodeum longer than declivity, posterodorsal corner of propodeum very bluntly angled. In profile view petiolar node thick, tapering upward, anterior, posterior and dorsal faces straight, anterior face vertical and formed a right angle with dorsal face, posterior face steeply sloped and formed a more blunter angle with dorsal face. Subpetiolar process with small circular fenestra, anteroventral corner blunt, posteroventral corner with a small tooth. In dorsal view the node trapezoid, narrowed forward, anterior border straight, lateral borders weakly convex, posterior border slightly concave. Gaster slightly constricted between the two basal segments. Mandibles smooth and shining, very sparsely punctured. Head and gaster densely and finely punctured, relatively dim. Alitrunk and petiole abundantly and superficially punctured, relatively shining. Surface of the whole body and appendages with dense decumbent

pubescence, erect hairs only present on anterior portion of head and apex of gaster. Body in color yellowish brown.

Holotype: worker, No. A97-2990, 840 m, Bakaxiaozhai Village, Menglun Town, Mengla County, Yunnan Province, 08-XII-1997, collected in a soil sample of seasonal rain forest by Yang Bilun.



Figs. 16~27 *Ponera* workers; 16~18. *P. longlina*, sp. nov.; 19~21. *P. chiponensis* Terayama; 22~24. *P. baka*, sp. nov.; 25~27. *P. oreas* (Wheeler); 16, 19, 22, 25. head in full-face view; 17, 20, 23, 26. body in profile view; 18, 21, 24, 27. petiolar node in dorsal view; 19~21 after Terayama (1986); 25~27 after Taylor (1967)

This new species is close to *P. chiponensis* Terayama (Figs. 19~21), but with head as broad in front as in the back; Anterior margin of clypeus without a blunt tooth in the middle; Mandible only with 3 apical teeth; In profile view petiolar node relatively thin, subpeti-



olar process with small fenestra, anteroventral corner bluntly angled, posteroventral corner only with a small tooth.

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## REFERENCES

- [1] Bolton B. A new general catalogue of the ants of the world[M]. Cambridge: Harvard University Press, 1995, 1-504.
- [2] Ogata K. A generic synopsis of the poneroid complex of the family Formicidae in Japan. Part. 1. Subfamilies Ponerinae and Cerapachyinae[J]. *Esakia*, 1987, 25: 97-132.
- [3] Taylor R W. A monographic revision of the ant genus *Ponera* Latreille (Hymenoptera: Formicidae)[J]. *Pacific Insects Monograph*, 1967, 13: 1-112.
- [4] Terayama M. Two new ants of the genus *Ponera* (Hymenoptera, Formicidae) from Taiwan[J]. *Kontyu*, 1986, 54(4): 591-595.
- [5] Wheeler W M. Ants collected by Professor F. Silvestri in China[J]. *Boll. Lab. Zool. Gen. Agrar. Portici*, 1928, 22: 3-38.
- [6] Xu Z H, Yang Z W, Yu X W. Three Ponerinae species newly recorded in China and new distribution of *Ponera sinensis* [J]. *Journal of Southwest Forestry College*, 1998, 18(4): 221-226.

# 中国猛蚁属系统分类研究

## (膜翅目: 蚁科)

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记述中国猛蚁属 *Ponera* Latreille 昆虫8种, 其中在云南省西双版纳自然保护区发现并描述5新种, 模式标本保存于西南林学院资源学院昆虫标本室。中华猛蚁 *P. sinensis* Wheeler (图4~6) 分布于香港; 阿里山猛蚁 *P. alisana* Terayama (图10~12) 和知本猛蚁 *P. chiponensis* Terayama (图19~20) 分布于台湾省。提供了8个种的工蚁分种检索表。新种模式标本和示差鉴别特征如下:

### 1. 五齿猛蚁 *Ponera pentodontos*, 新种 (图1~3)

正模: 工蚁, No. A97-2046, 730 m, 云南省勐腊县补蚌, 1997-VIII-17, 曾光。副模: 1工蚁, 同正模; 1工蚁, 同正模但 No. A97-2028; 8工蚁, 同正模但 No. A97-2089。本新种与中华猛蚁 *P. sinensis* Wheeler (图4~6) 接近, 但上颚具5个近等大的齿; 头部较宽, 头比 CI 95-98; 腹柄结较窄, 腹柄结比 PNI 76-81; 腹柄下突前下角圆钝。

### 2. 勐腊猛蚁 *Ponera menglana*, 新种 (图7~9)

正模: 工蚁, No. A97-2046, 730 m, 云南省勐腊县补蚌, 1997-VIII-17, 曾光。副模: 4

工蚁, 2雄蚁, 同正模; 3工蚁, 同正模但 No. A97-2024; 9工蚁, 同正模但 No. A97-2029; 7工蚁, 1脱翅雌蚁, No. A97-1134, 660 m, 云南省勐腊县勐仑镇翠屏峰, 1997-VIII-10, 何云峰; 6工蚁, 同 No. A97-1134但 No. A97-1153, 柳太勇; 9工蚁, 2雌蚁, 同 No. A97-1134但 No. A97-1162, 徐正会。本新种与中华猛蚁 *P. sinensis* Wheeler (图4~6) 接近, 但身体较大, 头长 HL 0.65-0.68, 头宽 HW 0.58-0.60; 侧面观腹柄结后上角较隆起; 腹柄下突后下角仅具1微小齿。

### 3. 南贡山猛蚁 *Ponera nangongshana*, 新种 (图13~15)

正模: 工蚁, No. A98-824, 1620 m, 云南省勐腊县南贡山, 1998-III-15, 何云峰。副模: 3工蚁, 同正模; 1工蚁, 同正模但 No. A98-819; 6工蚁, 同正模但 Nos. A97-2184, A97-2186, 1525m。本新种与阿里山猛蚁 *P. alisana* Terayama (图10~12) 接近, 但柄节末端不到达后头缘; 唇基前缘中央缺少1钝齿; 腹柄下突后下角不具齿。

### 4. 龙林猛蚁 *Ponera longlina*, 新种 (图16~18)

正模: 工蚁, No. A97-1315, 1050 m, 云南省勐腊县龙林, 1997-VIII-11, 何云峰。本新种与分布于菲律宾的女山神猛蚁 *P. oreas* Wheeler (图25~27) 接近, 但复眼仅具1个小眼; 腹柄结较窄, 腹柄宽 DPW 0.25, 腹柄结比 PNI 71; 侧面观腹柄下突后下角齿较小, 指向后方。

### 5. 巴卡猛蚁 *Ponera baka*, 新种 (图22~24)

正模: 工蚁, No. A97-2990, 840 m, 云南省勐腊县勐仑镇巴卡小寨, 1997-XII-08, 杨比伦。本新种与知本猛蚁 *P. chiponensis* Terayama (图19~21) 接近, 但头前部与后部等宽; 唇基前缘中央缺少1钝齿; 上颚只具3个端齿; 侧面观腹柄结较薄, 腹柄下突具小窗斑, 前下角钝角状, 后下角只具1个小齿。

关键词: 膜翅目 蚁科 猛蚁属 系统分类 中国